

## REVIEWS OF EDUCATIONAL MATERIAL

James C. Eisenach, M.D., Editor

**Introduction to Anesthesia.** Edited by D. E. Longnecker F. L. Murphy. Philadelphia, WB Saunders, 1997. Pages: 518. Price: \$47.50.

I well remember my first rotation in anesthesia, with my copy of the sixth edition of *Introduction to Anesthesia* as my guide. It was part of the critical mass that sparked my interest and fascination with our specialty. Now comes the ninth edition, with the expected improvements and advancements, but still as fundamental as ever.

The book is divided into seven sections, which include, among others, "Preparing to Administer Anesthesia," "Administering Anesthesia," "Drugs Used in Anesthesia," and "Patients with Special Requirements." The order of the chapters flows logically, and reading the book cover-to-cover will not leave the reader confused, a result of the logical buildup of knowledge. However, there are a few bumps along the way. "Hazards of Anesthesia," which deals with intraoperative problems, is in the section on "Care Outside the Operating Room." The figures and tables nicely complement the text, although a few of the figures were of marginal quality.

In general, I found the writing superb, and rarely were explanations confusing. But, I am not a third-year medical student anymore! What might seem logical to me might not be logical to a beginning student. In any case, there were some gems, which might not be appreciated by the novice, but would be by those of us who have had our share of challenges in the operating room. For example, in a wonderful chapter entitled "Conduct of General Anesthesia," the reader is taken step-by-step through a general anesthetic. The author writes "Target planning requires that the anesthesiologist imagine the state to be achieved for the patient at the end of the case and work back in time to plan the needed steps to achieve that state." A very basic tenet, one that I wish my residents would learn sooner rather than later. I also found the chapters dealing with patient diseases to be generally excellent. These chapters leave no doubt as to the anesthetic implications of preexisting disease.

There is little for me to disagree with in this book. But one example is in the chapter on premedication. The author writes "Diazepam is unsuited for parental use because of inconsistent absorption from intramuscular sites and pain and phlebitis after intravenous injection." In a perfect world, we would all use midazolam, but we live in a managed-care era, and believe me, intravenous diazepam is back! Also, in the chapter on patients with renal disease, the author writes that sevoflurane can be used in patients with renal disease. Considering the potential problems with Compound A, this is a controversial statement. My final complaint regards the reference sections. Generally, there were few references, which I found incongruous, especially in a book that took the time, effort, and space to include a chapter on developing personal learning habits. But more bothersome, was that the references were not specifically cited in the text, but were "general references," which leave the reader struggling to find which specific reference is being cited—never a good thing as far as I am concerned. Lastly, a random check of 20 references revealed five errors, based on the citations in Medline. None of these errors were serious enough, however, to make it difficult for the reader to retrieve the references.

There are a few glaring errors in the text. In the chapter on obstetric anesthesia, the reader is told that hypotension after a spinal block

can be managed with 20–40 mg of phenylephrine. This could easily confuse a novice. On the next page, subarachnoid injection of fentanyl, 25–30 mg, is recommended. Even a novice will think something is amiss when he or she tries to inject 500 ml of fentanyl into the subarachnoid space. There are several errors of this type in this chapter, and hopefully these will be removed from the next edition. Another error occurs in the discussion of malignant hyperthermia (Chapter 36), as we are told that MH is triggered by potent inhaled anesthetics and *nondepolarizing* muscle relaxants. Further, the phone numbers and addresses for MHAUS and the North American MH Registry are out of date.

In general, I found this book easy to read and enjoyable as well. Despite the minor drawbacks, I still highly recommend it, and it will no doubt continue to inspire (and be part of the critical mass of) many future students to come.

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**The Age of Miracles: Medicine and Surgery in the Nineteenth Century.** By G. Williams. Chicago, Academy Chicago Publishers, 1987. Pages: 234. Price: \$10.00.

A good place to start with this book is its companion and earlier volume, *The Age of Agony*, also by Guy Williams, which focuses on the century before *The Age of Miracles*. One gains a deeper appreciation for the "miracles" when one has just visited the pustule-laden, pockmarked, vermin-ridden eighteenth century patient undergoing horrific "medical" ministrations (of which death by hemorrhage from blood-letting was one of the less disgusting methods of mistreatment). The advances of nineteenth century western medicine, such as anesthesia, sepsis, knowledge of vectors of infection, and attention to cleanliness, then become even more striking.

*The Age of Miracles* is meant for the layman with an interest in the history of medicine. I was pleased to discover this history book is easy to read and entertaining because I am less than an expert in the field (the last history book I read covered American history and was called *Dave Barry Slept Here*). Most likely, scholars of the history of medicine would be frustrated by the minimal references provided and the brief index. The index is only useful for looking up historical figures because other subjects are severely underrepresented.

The book contains 16 chapters of variable length, each with a different theme or central figure. Surprisingly enough, Williams chooses to place Edward Jenner and the smallpox vaccine story in his previous book, although the first vaccination was not performed until 1796, and places John Hunter (1728–1793) in the current book. However, Williams posits that Hunter, through his teaching and 13,000-specimen collection, was of incomparable influence on the development of medicine in the nineteenth century. Other chapters devoted to single innovators focus on Florence Nightingale, Hugh Owen Thomas (orthopedics), Jean-Martin Charcot, and Marie Curie.

Theme-oriented chapters, such as "Antiseptics," are still biographical in nature but bring in a wider range of players. Thus, Pasteur and Lister are given center stage, with rather brief reference to Koch, Holmes (Oliver Wendell, not Sherlock), and Billroth. In a book striving for brevity, editorial choices must be made, but it is still surprising that no mention appears of the preeminent pathologist of the century, Rudolf Virchow (a compelling portrait of Virchow can be found in *Doctors: The Biography of Medicine* by Sherwin B. Nuland).

Williams is decidedly Anglocentric, and, wherever possible, he emphasizes the British contribution. Hence, in the 17-page chapter on "Anaesthetics" only four pages are devoted to the American discovery—the rest describes British figures such as Humphry Davy, James Simpson, and John Snow.

The strength of the book is Williams' ability to tell a good story—interesting childhood and domestic biographical details allow us to grasp historical figures as people in particular social and cultural contexts. Further, the liberal use of quotations from primary sources defines the characters and makes an already lively story even livelier. For example, the oral confession of an infamous bodysnatcher is directly quoted—we hear the chilling details of a murder committed to provide a young body for anatomic dissection.

*The Age of Miracles* is informative, entertaining, and—here's another miracle—it only costs 10 bucks.

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**Textbook of Intravenous Anesthesia.** Edited by P. F. White. Baltimore, Williams & Wilkins, 1997. Pages: 617. Price: \$89.00.

This hardback first-edition textbook is sure to become the text against which all others on the subject of intravenous anesthesia are measured. The editor, Dr. Paul F. White, has brought together a truly international and expert group of contributing authors. Under Dr. White's editorial guidance, these 56 authorities have created a cohesive, comprehensive, timely, and definitive reference covering all aspects of intravenous anesthesia.

The 617 pages of this information-packed, but surprisingly easy-to-read, textbook are well organized into eight sections and 30 chapters. The first section contains an enlightening history of intravenous anesthesia along with well-written background chapters on pharmacoki-

netic and pharmacodynamic principles and mechanisms of intravenous anesthesia and analgesia. In sections II–IV, the major anesthesia-related intravenous drug groups are discussed in depth. There is a consistent organization to the chapters that comprise these sections. In general, each chapter describes the physicochemical characteristics, known or proposed mechanism(s) of action, pharmacokinetics, pharmacodynamics, and clinical use of the members of a chemically distinct class of drugs. Historically important and currently available drugs are covered, as are several drugs currently in development. Of particular note is the laudable chapter on propofol written by the editor. The fifth section is devoted to anesthetic techniques. It includes chapters on balanced anesthesia, total intravenous anesthesia (TIVA), and neurolept and dissociative anesthesia. These integrative chapters are outstanding and clinically relevant. Also in this section are useful chapters on intravenous adjuvants to anesthesia and drug interactions. Section VI covers intravenous anesthesia as it relates to pediatric, geriatric, ambulatory surgery, and critically ill patients. The three chapters that make up section VII, "Controversies in Intravenous Anesthesia," present slightly differing perspectives on issues related to drug delivery systems, monitoring of anesthetic depth, and control of the stress response. These are excellent and interesting chapters that allow insight into the "hot" issues of intravenous anesthesia. Finally, section VIII contains two chapters. The first discusses intravenous anesthesia and patient outcomes, and the second is an intriguing and optimistic view of the future of intravenous anesthesia.

*Textbook of Intravenous Anesthesia* is richly and appropriately illustrated with black and white line drawings, graphs, and tables. Unfortunately, some of the figures are so small that portions of the incorporated text are difficult to read. Also, some figures and tables appear several pages away from the text referring to them. On a positive note, the book has a useful index and is extensively referenced.

On the backside of the title page of this book, we are invited to visit the publishers on the Internet at <http://www.wilkins.com>. With all the recent enthusiasm about the World Wide Web, I decided to take up the publishers on their invitation. After connecting to their main site, I easily navigated to the section pertaining to *Textbook of Intravenous Anesthesia*. Once there, I found a photographic image of the cover, the table of contents, a brief description, and a means for purchasing the textbook online. The promotional text aptly describes the book but gives a somewhat overblown view of its potential audience. Fortunately, the \$89.00 price is not overblown.

The editor does not specify his intended audience, but, given the current importance and likely increased future importance of intravenous anesthesia, I would recommend this textbook for all serious students of anesthesiology.

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